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VOL. VII. NO. 10. MAY 12, 1910

THE JOURNAL OF PHILOSOPHY
PSYCHOLOGY AND SCIENTIFIC METHODS

THE RELATIONAL ACCOUNT OF TRUTH

THE problem of the definition of truth is much like that of probability in that both belong to logic and can therefore be settled with a minimum of reference to metaphysics. In obvious recognition of this fact Professor James states that in so far as pragmatism is a methodological theory of truth it is no metaphysic, but, on the contrary, might be held by metaphysicians of whatever stamp.[1] And yet his writings on pragmatism show the constant concern to contrast "the belief that the world is still in the process of making with the belief that there is an eternal edition of it ready-made and complete." Doubtless the metaphysical aspects of truth are worthy of weighty considerations, but since it is confessedly quite unnecessary to thrash out questions of monism and pluralism, of idealism and realism in order to arrive at a logical definition, it will be the explicit aim of this paper to avoid such things wherever possible.

Now if we turn our attention to the problems of truth that seem to call for solution, we find that one difficulty is felt with especial keenness. Truth has often been defined as agreement of an idea with the object, but how this agreement is possible turns up as a perennial epistemological puzzle. It has been explained by Professor Royce as consisting of a form of "one-to-one correspondence" which the idea itself chooses and intends. From a different point of view Professor James regards an idea as agreeing with reality if it "works," if it "helps us to get into satisfactory relations with the rest of our experience." Both assertions are illuminating in their place, and perhaps they are not utterly inconsistent with each other; but however this may be, they bring up questions which we do not need to settle. For it is not solely ideas that can have the character of truth attributed to them. Any kind of a representation at all may be called true; but also many things can be true which are not thought of as representations. The matter that a proposition asserts is not ordinarily regarded as a representation or duplicate of something. Men of science and of practical affairs carry on investigations about the truth of particular matters without at all referring to "ideas" and "objects" and "agreement." Thereby they avoid many epistemological difficulties and differences, and this suggests that we may very profitably do the same.

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[1] "Pragmatism," New York, 1907, p. 54. Compare also the statement, "My account of truth is purely logical and relates to its definition only." This JOURNAL, Vol. V., p. 179.

The way thus cleared we pass on to the further difficulties which are described by Schiller as rendering impossible all definitions of truth not couched in terms of value.[2] Besides the "agreement" definition above discussed, he finds that non-pragmatic literature furnishes only one respectable attempt at a definition. The true has often been said to be that which fits into a system. Schiller's strenuous objections to this formulation seem to be quite sound, but he fails to discern that it contains a certain theme which, we shall later point out, really underlies all theories of truth. He argues with justice that the above formulation is no criterion since falsehoods can themselves form a system. Similarly he adds "It (the above definition) would be adequate if we really had an indefeasible system of absolute truth by whose aid we might detect the inconsistencies of the pseudo-systems. But where shall we find such truth? The bodies of 'truth' which *de facto* we acknowledge in our sciences are all partial systems, incomplete in themselves and discrepant with each other. If nothing short of absolute truth is perfectly systematic, and if all our systems are imperfect, is not all our 'truth' tainted with falsehood, and must it not be admitted that *no* (actual) *systems are 'true'?*"[3] Furthermore, in his well-known way, he insists that it is not good philosophy to conceive individual systems as in the end converging in one absolute and all-embracing system which alone would be indubitably and strictly "true." For this is to commit the fallacy of arguing from the unity of a concept to a similar unity of the concrete ways of exemplifying that concept and so to assume that there is one system and no more into which all truth must finally be fitted. Accordingly he concludes that only two ways remain to fasten down truth: if an *ens realissimum* is not assumed, then there remains nothing else but to tie truth to utility, to particular "fruits" and "consequences."

We desire to submit, on the contrary, that truth can be firmly anchored regardless of metaphysical controversies about the existence of an all-embracing system of relations. This lesson can be abstracted from the results of modern mathematical research. There is no "absolute" system of spatial relations, no absolute geometry, but within each particular geometry, relations, and the truths that affirm them, are as hard fixed as any "absolute truth" could ever be. We know that the proposition that a straight line is the shortest distance between two points is by no means absolutely true in the sense that Kant took it to be; but with respect to that particular system of relations called the Euclidean geometry it still is considered as *absolutely* true. Certainly relative truth is not absolute truth (truth without respect); but relative truth is *absolutely* relatively true. Look at it from any point you please, and it always remains true with reference to the standpoint to which it *is* relative. If a sum total of particular geometrical systems or of particular scientific systems should be shown to exist as a unitary whole in addition to these particular systems themselves, well and good! We should know something *additional* about being and about truth, but it is emphatically to be maintained that in order to have truth it is not necessary to chain it to the whole of being.

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[2] "Humanism," London, 1903, Chap. III.

[3] *Ibid.*, p. 48.

In order to develop this thesis a few words need to be said as to what being *logically* is, as to what is meant by saying that a thing exists. For as Taylor says, and as James agrees, " 'Reality' is, in general, what truths have to take account of."[4] Or to express the same thing in our own terminology, a truth is something that *designates* certain relations which have some attribute or other which entitles them to be called existent. With this recognition of the relation between truth and existence we inquire, What is logically meant by saying that anything exists,—say the traditional fairy, for instance, or Achilles, or the number two, or this desk? Obviously all these things have existence in some sense, since we regard them as legitimate objects for logical discourse. But it is immediately noticeable that some distinction is drawn with reference to the existence of the fairy as compared with that of the desk. It therefore suggests itself first to inquire what is the property common to all things that are said to exist; and secondly, what are the additional properties that belong to such things as this desk which so distinguish them from such things as fairies that the latter come at times to be called unreal?

To say that a fairy has existence is to connect it with that group of facts known to childhood which consists of dragons and heroes and demons and the rest of wonderland. To assert a fairy is to imply these things. Similarly to assert that the number two exists is—as any exact definition of "two" will clearly bring out—to imply the system of whole numbers, or at least some essential part thereof. And finally, when we say that this desk exists, we mean not with reference to fairy-land nor with reference to the whole-number system, but with reference to such objects as the other things in this room, *e. g.*, this chair, those walls, etc. In short, when one affirms that something exists, one implicitly or explicitly indicates some specific context and says that that thing implies that context. Not to refer to some such context and yet to try to affirm some existence would be to utter meaningless or self-contradictory words. To put this view of existence in a formula we should say that to exist means, with reference to some determinate system of relations, to imply that system.

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[4] "Pragmatism," p. 244.

But since this definition applies to the objects of the reason, the imagination, and the sensible world alike, there immediately arises an objection which needs to be answered before we proceed. For how comes it, then, that such things as fairies have come to be called unreal in comparison with the objects of the physical world? It is simply because we have selected that particular system called the physical world as the one which is most important for our activity and for our thought, and thus in a secondary sense have come to call it *the* real world. But in the primary sense of the term fairies exist no less than do the physical objects.

The first step toward a logical definition of truth consists in making a logical definition of existence. This being done, if we hereupon proceed to say a few words as to what constitutes a discovery that some precise thing exists, we shall find that we have come upon truth almost before we know it. To find out whether a thing exists one of course tries where possible to come in perceptual contact with it. One lets his sense organs play upon it, finds that his sensations do or do not imply the thing, and passes his judgment accordingly. But often it is inconvenient or impossible thus to get at the thing itself, and then one must content himself with examining the thing's environment or such parts of it as are accessible and then one searches in the latter for indications of the presence of the thing. If, for instance, I wish to learn whether "La Tosca" was played at the opera last night, I can not now put myself in immediate perception of the performance, but I can at any rate examine what one might reasonably call the environment of the opera, viz., the play-bills, the newspapers, the knowledge of my friends, etc. If "La Tosca" existed last evening, it existed with reference to a very definite system of relations, and I am now examining that system—or such parts of it as I can get at—to see if it implies "La Tosca." I can be absolutely certain that that system either does or does not imply "La Tosca"; hence all that I should need in order to pass a certain judgment that the performance, let us say, was given, would be to get at and examine all the parts of that system essential for determining the point at issue. But unfortunately I can not get at all those parts, and precisely because that performance is now an event of the past, and therefore, since I should look in vain for absolute certainty, I have to content myself with reasonable indications that the system implies that "La Tosca" was given last night. In so doing I form the familiar probable judgment. If, on the other hand, not an operatic performance but some abstract mathematical entity were in question, and I needed to find out whether the latter existed with reference to some specified system of mathematical relations, I could (if I had the requisite mathematical ability) make a thorough examination of this mathematical system, and could accordingly pass an absolutely certain judgment that the entity in question, let us say, is implied. But whether one passes probable judgments or certain judgments; whether one is considering the existence of a physical or an imaginary or an abstract logical object with reference to its specified system of relations;—what one does is to search that system for indications that that object is or is not implied. It is easy to put this into a formula at once, and we can illustrate and make it clearer later on. *To be true is, with reference to some determinate system of relations, to designate certain relations which are implied by that system.*

First we will illustrate this with concrete examples; next, show how it meets the difficulties which Schiller and James draw attention to; and this will lead us briefly to investigate in how far it agrees with pragmatic standards, and finally, in how far it must be used—consciously or unconsciously—in any self-consistent philosophy.

The simplest example of truth in the abstract is furnished by the syllogism. The premises state that all *A* is *B* and that all *B* is *C;* the conclusion, all *A* is *C*, is hereupon said to be true, and by this nothing more is meant than that this conclusion designates a relation which those premises imply. Again, the proposition that the sum of the angles of a triangle is equal to two right angles is frequently called true. But of course it is true only with reference to the Euclidean system and not with reference to the pseudo-spherical geometry or certain other non-Euclidean space systems. Euclid's system implies it, while these others do not. To take a physical example, suppose that I affirm that this paper is white. I am justified in believing this statement to be absolutely true provided that I give it any meaning at all. For I mean to indicate a certain complex system of relations in which human beings with sense organs and sensations like my own and also objects capable of affecting those organs like this paper have their place. And with reference to the system of relations that human experience of this sort constitutes, I say that this paper is white, and I mean that this fact is implied by that system of human experience. I do not say that this paper is white and mean to refer to a system of experience possessed by beings whose color-vision lacks the sensation, white. But I make the statement with precise, though unexpressed, reference to our accepted human experience, and as such the statement is *absolutely* true. In this respect it does not differ one whit from any discovered mathematical fact, and since even James admits that the latter have an absolute and eternal character, the same thing must be admitted of truths which have a more obvious human character.

But the relational definition is very sharply to be distinguished from the description of truth as mere "systematic coherence" which Schiller criticizes with much justice. The Ptolemaic theory, as he would suggest, is quite systematic and yet is held to be false. The real reason for this is that *internal consistency does not make the thing that has it true.* It requires consistency with external things for that, and then the thing is true only with reference to those external things. But in so far as the "coherence" theory suspects that truth is ultimately based on consistency of some form or other, it pleads for what any consistent pragmatism must admit.

But, as I hope has been made clear, a theory of truth based on the implication relation does not have to make reference to an "all-embracing" system of relations. Indeed, even if such a thing as a sum total of relations should be proved self-contradictory, the relational view of truth would be left essentially unaffected. For no one doubts that we have particular systems of relations, and I hope that it is clear that their implications are such as "no further experience will ever alter." What is relationally true to-day can not be relationally false to-morrow if it is essentially the same "what." The Ptolemaic astronomy was no truer a thousand years ago than it is to-day. All will admit that it would be absurd to say that the solar system changed when the heliocentric system came to be enunciated. The latter theory designates certain relations which the solar system implies. The Ptolemaic system does not do this and never did. Hence we may be sure that it is relationally false regardless of whether we shall ever be able to measure it up by an "all-embracing system of reality."

The above suggests the current controversy concerning the mutability of truths, and with this question we will commence a brief discussion of relationalism as compared with pragmatism. James's statement that the true is "only the expedient in the way of our thinking" is succeeded by the remark that the Ptolemaic system was quite expedient before the heliocentric theory was recognized. It would seem to follow that the Ptolemaic theory was once true—else what is the use of speaking about all this? But James frequently draws our full attention by means of some startling paradox, and when we excitedly turn toward him he proceeds to define his epithets until they come to lose much of the startling character that originally drew our attention. Hence, though he explicitly states that the Ptolemaic theory was once expedient, he is quick to add an explanation. "When new experiences lead to retrospective judgments, using the past tense, what these judgments utter was true, even though no past thinker had been there. We live forwards, a Danish thinker has said, but we understand backwards."[5] Ergo, the Ptolemaic theory was false, after all, and hence it was not *made* false, and likewise the heliocentric theory was not *made* true. If this be but granted, then it would seem possible to resolve some of the entanglement by distinguishing between a truth and the realization or consciousness of that truth. The former in itself would be a mere thing *in posse,* to borrow James's expression for it, while the realization would mark the truth in actual use. The passage from the former to the latter would be the change or mutation. It would be a passage from an abstract thing to a concrete thing which in many respects, at least, should be considered the more important of the two. But though change thus comes in as an important fact, it is confusing to say that it is the truths themselves that change. Ideas change, and thereby acquire new implications. But the implication relation itself is not subject to change, and truth is only a certain aspect of implication relation. Hence truth is like the number two, which it would be useless to call either static or changing.

On one point relationalism and pragmatism seem to take sharp issue. That point is with reference to the greater-less relation as holding between truths. Given, let us say, a set of ten simple propositions and suppose that they were considered with reference to a system of relations by which eight of them were implied while two of them were contradicted. Then if this set were to be compared with another set of ten simple propositions all of which were implied by that system of relations, both relationalism and pragmatism might agree that the latter propositions as a set were *more* true than the former. But now suppose a different situation. Suppose that we were considering two sets of propositions and that in each case every one of them was in thorough logical consistency with the system of relations by which we were measuring them. Then relationalism would unhesitatingly pronounce them both true and could not attribute any meaning to saying that one is *more* true than the other. But pragmatism making truth directly depend upon utility rather than on implication, it follows that wherever one truth is more useful than another it must likewise be more true than that other. And since any given proposition varies in usefulness from day to day it is constantly sliding up and down the scale of truth as well. Now this is untenable. Barring cases such as we abstractly considered above, where they are partially implied and partially not implied by the system that measures their truth; barring these cases, a thing is either implied or it is not implied, it is either true or it is not true, and there's an end of the matter. The proposition, "This particular piece of paper is white," can not be described as less true than one that Taft is president or that I must eat in order to sustain my life, even though these three propositions have various degrees of usefulness.

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[5] *Ibid.*, p. 223.

It is not easy to dissuade oneself that most pragmatists, when they say that the truth of a thing depends on its practical consequences, mean just what is ordinarily meant by practical. What a business man would mean, for instance, if he employed the term. But we have been given plainly to understand that it was never meant to oppose it to the purely cognitive.[6] If we had known that we should never have been so startled! For it ought not to be hard to convince any one that when we think of something as true we have some purpose on hand for which that thing may have value; and in estimating the truth of that thing it may be confessed that we select the system of relations by which we measure it. But no matter how subtly usefulness be defined or redefined, it will always admit of degrees,—provided the term be not subjected to our unrecognizable distortion. And hence whatever meaning "usefulness" may come to acquire, if truth be made a function of it, there will always be some truths less true than other truths because the latter happen to be more useful.

Pragmatists have so frequently challenged their opponents to define their own view of truth that the question came to the writer's mind, "What is it which the non-pragmatists assert, which the pragmatists deny?" The present discussion, however crude its form, serves to hint at the fundamental issue. And yet to what extent the relational account is in utter disaccord with the central meaning of the pragmatists, I should incline rather to ask than to state. I do not see how the essential thesis of relationalism, with whatever particular errors I may have expounded it, can be successfully contradicted by any doctrine. Phenomenalism, for instance, is by no means inconsistent with relationalism. Indeed I hope that it has been shown that distinctly human truths (statements of color, etc.) are quite as absolute in character as are truths that are less obviously human. Relationalism seems to be presupposed—even though unconsciously—in every consistent philosophy. Certainly it is not so presupposed by a pragmatism that interprets the term, "practical" "in the narrow sense." Mere utility will not inevitably drag along the implication relation. But wherever statements are made that ideas are true because they "work," because they successfully "lead" to other ideas and to other realities,—there we are simply listening to descriptions of the implication relation in certain concrete manifestations. For that one thing can imply another means nothing more than that things go together in our experience; and hence that one thing may "lead" to the other. And without this implication, this togetherness, all value would fade into nothingness.

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[6] *Phil. Rev.*, January, 1908.

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ON METHODS AND METHODOLOGY

THE science of methodology has, for many years, been recognized as a branch of logical theory, but, concerning its objects and its methods there appears to be neither general agreement nor clear discussion. It is universally asserted among philosophers that there is a body of knowledge called science, that this has been obtained by a certain vaguely defined scientific method, and that this method should not be ignored in the elucidation of logical theory; but here agreement seems to end. Since the period of Mill and Bain, the results of the study have been meager. The study appears to have become entangled with metaphysical subtleties and to have been barren of definite conclusions which have any recognizable bearing on the sciences from which they have been abstracted. The errors of the old empirical writers have been discovered and pointed out, but no clear and useful conclusions appear to have taken the place of those which have been criticized and abandoned.

This barrenness appears to me to be due to the fact that modern logicians have been largely occupied with the metaphysical foundations of their science, and so have lost touch with the scientific methods which form the rightful subject-matter of their study. The present barrenness and indeterminateness points to the conclusion that a valid and fertile methodology should proceed by the empirical rather than by the metaphysical method.

It is instructive to note that a similar conclusion has been reached by another course of reasoning. This line of thought is best illustrated by some of the views of Professor Dewey. In a criticism of some contemporary logical theory he remarks that "Logical theory will get along as well as reflective practise when it sticks close by